

CLAIMS

I claim:

1. (currently amended) A vehicle suspension system capable of providing dynamic weight jacking:
 - a) whereby said dynamic weight jacking is controlled by steering angle, and
 - b) whereby an incremental clockwise rotation of the a steering wheel will cause said dynamic weight jacking to incrementally but not necessarily linearly increase weight vertical load on the a right front tire and a left rear tire, and decrease weight vertical load on the a left front tire and a right rear tire, and
 - c) whereby an incremental counterclockwise rotation of the said steering wheel will cause said dynamic weight jacking to incrementally but not necessarily linearly increase weight vertical load on the said left front tire and said right rear tire, and decrease weight vertical load on the said right front tire and said left rear tire.
2. (previously presented) The suspension in claim 1 whereby the means of said dynamic weight jacking is accomplished by changing the geometry of an anti-swaybar.
3. (original) The suspension in claim 2 whereby the change in geometry of said anti-swaybar is controlled by a mechanical linkage.
4. (currently amended) The suspension in claim 3 whereby said mechanical linkage connects a steering member or a suspension member which moves with movement of the said steering member to a rocker assembly, and said rocker assembly is connected to said anti-swaybar or a droplink for said anti-swaybar and whereby said rocker assembly pivots on a mount attached to an A-arm.
5. (withdrawn, currently amended) The suspension in claim 3 whereby said mechanical linkage connects a steering member or suspension member which moves with movement of the a steering member, to an eccentric mount for said anti-swaybar Said , and said eccentric mount is configured to move the said anti-swaybar

relative to a chassis support, with movement of the said steering member.

6. (withdrawn) The suspension in claim 1 whereby the means of changing said dynamic weight jacking is accomplished through the use of one or more of a secondary spring.
7. (withdrawn) The suspension in claim 1 whereby the means of changing said dynamic weight jacking is accomplished through a change in preload of one or more of a main suspension spring.
8. (withdrawn) The suspension in claim 7 whereby said change in preload of said main suspension spring is accomplished through a threaded collar on a strut assembly.
9. (withdrawn, currently amended) The suspension in claim 1 whereby said means of weight jacking ~~the~~ a vehicle allows variable adjustment for the amount of weight jacking for a given change in steering angle.
10. (withdrawn) The suspension in claim 2 whereby the geometry of said anti-swaybar is changed through a variable length drop link.
11. (withdrawn) The suspension in claim 10 whereby said drop link contains a hydraulic cylinder.
12. (previously presented) The suspension in claim 1 whereby the means of changing said dynamic weight jacking is implemented through a mechanical assembly.
13. (withdrawn) The suspension in claim 1 whereby the means of changing said dynamic weight jacking is accomplished through pneumatic means.
14. (withdrawn) The suspension in claim 1 whereby the means of changing said dynamic weight jacking is accomplished through hydraulic means.

15. (withdrawn) The suspension in claim 1 whereby the means of changing said dynamic weight jacking is accomplished through electric means.
16. (currently amended) A vehicle suspension assembly capable of:
 - a) transmitting force applied at a steering wheel to a change in vertical load at a wheel, and
 - b) whereby an incremental clockwise rotation of said steering wheel will cause said change in vertical load to incrementally ~~but not necessarily linearly~~ increase vertical load on the ~~a~~ right front tire and ~~a~~ left rear tire, and decrease vertical load on the ~~a~~ left front tire and ~~a~~ right rear tire, and
 - c) whereby an incremental counterclockwise rotation of said steering wheel will cause said change in vertical load to incrementally ~~but not necessarily linearly~~ increase vertical load on ~~said the weight weight~~ left front tire and ~~said~~ right rear tire, and decrease ~~weight vertical load~~ on the ~~said~~ right front tire and ~~said~~ left rear tire.
17. (previously presented) The suspension in claim 16 whereby the means of said change in vertical load is implemented through a mechanical assembly.
18. (withdrawn) The suspension in claim 16 whereby the means of said change in vertical load is accomplished through pneumatic means.
19. (withdrawn) The suspension in claim 16 whereby the means of said change in vertical load is accomplished through hydraulic means.
20. (new) A vehicle suspension system capable of providing dynamic weight jacking:
 - a) whereby said dynamic weight jacking is controlled by steering angle, and
 - b) whereby an incremental clockwise rotation of a steering wheel will cause said dynamic weight jacking to incrementally increase vertical load on a right front tire and a left rear tire, and decrease vertical load on a left front tire and a right rear tire, and
 - c) whereby an incremental counterclockwise rotation of said steering wheel will cause

said dynamic weight jacking to incrementally increase vertical load on said left front tire and said right rear tire, and decrease vertical load on said right front tire and said left rear tire, and

- d) whereby the means of said dynamic weight jacking is accomplished by changing the geometry of an anti-swaybar, and
- e) whereby the change in geometry of said anti-swaybar is controlled by a mechanical linkage, and
- f) whereby said mechanical linkage connects a steering member or a suspension member which moves with movement of said steering member to a rocker assembly, and said rocker assembly is connected to said anti-swaybar or a droplink for said anti-swaybar and whereby said rocker assembly pivots on a mount attached to an A-arm.